

CURRICULUM VITAE

As of February 14, 2017

Jeffrey Paul Chanton

Fellow, American Geophysical Union

Distinguished Research Professor

John W. Winchester Professor of Oceanography

Aldo Leopold Fellow

**Department of Earth, Ocean and Atmospheric Science, Florida State University,
Tallahassee, Florida 32306**

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A. Education

New College Natural Sciences A.B. 1975

UNC-Chapel Hill Marine Sciences M.S. 1979

UNC-Chapel Hill Marine Science PhD. 1985

B. Experience

2010. Professor, Dept. of Earth, Ocean and Atmospheric Science, Florida State University.

1997. Professor, Dept. of Oceanography, Florida State University. Concurrent Doctoral Directive Status in the Department of Chemistry and Biochemistry.

1993. Associate Professor, Dept. of Oceanography, Florida State University.

1988. Assistant Professor, Dept. of Oceanography, Florida State University.

1987. Research Assistant Professor, UNC Chapel Hill.

2016-2001 Consultant to the Waste Industry (Waste Management, Veolia, Creed) on solutions for methane emissions, methane oxidation and sulfate bearing waste and recycled materials.

C. Awards

2015. Fellow, American Geophysical Union.

2015. Top 10 Water Analysis and Environmental Papers (Environmental Science and Technology's most significant papers of the last 18 months), for Chanton et al., 2015.

2014. Transformation through Teaching, FSU Spiritual Life Project.

2009. Editor's citation for outstanding reviewer, Limnology and Oceanography.

2008. William H. Patrick Jr. Memorial Lecturer at the Soil Science Society of America Annual Meeting, Houston, TX

2006. Distinguished Research Professor Award, Florida State University

2005. Aldo Leopold Fellowship Award

2005. Florida Wildlife Federation Conservation Communicator of the Year

2003. Awarded named Professorship, John W. Winchester Professor of Oceanography.

1993. Developing Scholar Award, Florida State University.

D. My Research encompasses ten different areas:

1. Permafrost Decomposition in the Arctic
2. Wetlands-- peatland Carbon cycling in northern high latitudes and tropical systems
3. Using Radiocarbon to determine the fate of Deep Water Horizon Oil and Gas
2. Food webs-- trophic relationships in estuaries
3. Reducing methane emissions to the atmosphere, designing landfill cover soils, which promote the growth of methane-consuming bacteria
4. Seeking solutions to allow large scale beneficial reuse of residual screen material, a by product of recycling facilities and a product containing gypsum, or calcium sulfate
5. Sulfur cycling in marine sediments and sulfur isotopes as an indicator of the strength of sulfate reduction
6. Methane gas hydrates, which some estimate may be a large reservoir of fossil fuel to be mined
7. Groundwater discharge, an overlooked process which is important to the nutrient budgets of coastal waters
8. Nutrient inputs to aquifers from septic tank discharge, groundwater tracing

E. Graduate Degrees Supervised

Ph.D. Dissertations Supervised/Year of Completion/Current Position

James Happell	1992 Faculty, University of Miami
Jennifer Cherrier	1997 <i>co-advised (with J. Bauer)</i> . Faculty, Florida A & M
Glynnis Bugna	1999 Research Faculty, Florida A & M University, Wetlands Center.
Joanne Lombardi	1999 Industry.
Lynda Chasar	2002 US Geological Survey
Kevin Dillon	2003 Faculty, University of Southern Mississippi.
Carl Childs	2004 <i>co-advised (with Lita Proctor)</i> . NOAA.
Jim Prater	2005 Office of Naval Research.
Laura Lapham	2007 <i>Co-advised (with Chris Martens at UNC-Chapel Hill)</i> . Faculty, University of Maryland.
Issac Santos	2008 <i>Co-advised (with William Burnett)</i> , Southern Cross University, Au..
Rachel Wilson	2010 National Research council position Florida State University, Adjunct Asst. Prof.
Linda Fitzhugh,	2011 Faculty, Florida Gulf Coast State College.
James Nelson	2011 Research Faculty, Marine Biology Lab, Woods Hole, Mass.
Jiyoung Paeng	2012 Post doctoral position in Korea
Jane E. Corbett	2012 NASA postdoctoral fellowship.
Amanda Tazaz	2013 Science Educator
Alexandra Harper	2016 co-advised with William Landing, NOAA Knauss Fellowship.

Suzanne Hodgkins 2016 Post doc, Department of Chemistry and Biochemistry, Florida State University.

Puja Jasrotia 2016. Florida department of Environmental Protection

Oceanography M.S. Supervised

- Ghislain Gerard 1992
- Harmon Harden 1992
- Heidi Hertler 1993
- Michelle Epp 1993
- Glynnis Bugna 1995
- Mark Schrope 1995
- Trevor Popp 1998
- Kevin Dillon 1998
- Karen Liptay 1998
- Linda Rasmussen 2000
- Edward Toy 2000
- Dana Fields 2004
- Chad Hanson 2004
- Kelly Peeler 2004
- Jillian Fleiger 2006
- Kirsten Eller 2010 Co-advised
- Kristina Welch 2013
- Kelsey Rogers 2014
- Tyler Mauney 2015
- Erica Rau (coadvised with Y. Wnag) 2016
- Alejandra Mickle (co advised with D. Grubbs) 2016

Aquatic Environmental Science MS Supervised.

- John Hallas 2006
- Barbara Thomlinson 2007
- Lela Buttery 2008
- Kirk Clausen 2008
- Karen Shudes 2009
- Tim McGann 2009
- Beth Kostka 2010
- Corinne Rogalny 2010
- Alex Kaflin 2011
- Fara Illami 2011
- Kristen Humphries 2013
- Gonzalo Gonzales-Jurado 2013
- Dayma Wasmund-Nault 2013
- Shawna Kinsey 2013
- Ryan Venable 2013
- Sarah M. Hovey 2014
- Cullen C. Morris 2014
- Kiels T. Sims 2014
- Youzhu Wang 2014
- Jason R. Baum 2014.
- Ethan Bright 2015

- Andrew Briscoe 2015
- Reo Morris 2015
- Cindi Fischler 2015
- Molly Edson 2015
- Andrea Wylie 2016
- Kristin Perkins 2016

Baccalaureate Theses Supervised in the Dept. of Chemistry and Biochemistry and EOAS

- Michelle Rodriguez current
- Emily Brown current
- Brittany Rose Winkler 2016
- Kathryn Chandler 2015
- Claire A.S. Blaskiewicz 2014
- Angela Renee Dial 2010
- Laura Lapham 1997
- Mathew Sampson 1996
- Trevor Popp 1995
- Kim Percy 1993

Current Graduate Students

Ph.D.

- Suzzane Hodgkins
- Kelsey Rogers

M.S.

- Erica Rau
- Ali Mickel

Current Post docs & Research Faculty:

- Dr. Rachel Wilson
- Dr. Beth Huettel

Previous Post Docs

- Dr. Cedric Magin
- Dr. Koenraad Mathieu
- Dr. Behzad Mortazavi
- Dr. David Powelson
- Dr. Laura Lapham
- Dr. Ji Young Paeng
- Dr. Malak Tfaily

F. Invited Presentations

2016. Ahead of the Tide. Rising Waters: Threats to people, beaches and wildlife. Cavu Educational Series of webcasts.

2016. American Society of Limnology and Oceanography, Santa Fe, NM. Radiocarbon tracing of Petrocarbon following the Deep Water Horizon Oil Spill. June, 2016.

2016. Florida American Chemical Society Annual Meeting. Clearwater, FL, Tracers in the Gulf: Tracing the Deepwater Horizon Oil Spill. May 6, 2016.

2016. Oil Spill Science Meeting for First Responders, Seagrant. NOAA gulf of Mexico Disaster Response Center, Mobile, AL. Tracers in the Gulf. April 14, 2016.

2016. Oil spill and Ecosystem Science Conference, Tampa Florida. Isotope Tracing of the Effects of the Deep Water Horizon Oil Spill. February, 2016.

2016. Oil spill and Ecosystem Science Conference, Tampa Florida. Sea Level Rise, the Nuts and Bolts of an Inescapable Coastal Driver. February, 2016.

2015. American Geophysical Union Fall Meeting. Stability of Peatlands to Increased Temperature. December, 2015.

2015. Teaching Controversial Subjects, Climate Change to Evolution. FCR STEM conference, Orlando, Florida. December 2015.

2015. Tracers in the Gulf. Hoffman Environmental Chemistry Lecture, FSU Department of Chemistry. April 17, 2015.

2015. The Canary in the Climate Change Coal Mine, New Topics Lecture, New College, Sarasota Florida. March, 2015.

2014. Invited speaker American Geophysical Union Fall Meeting, San Francisco.

2014. Invited Speaker, University of North Carolina at Chapel Hill, Department of Marine Science

2014. Invited Speaker, FSU student chapter American Meteorological Society

2014. Invited Speaker, Department of Geography, Florida State University, September 12, 2014.

2014. Invited Speaker, Florida Gas Association, Clearwater,, Florida, June 27-28, 2014.

2014. Invited Speaker, Gordon Research Conference on Gas Hydrates, Galveston Texas, March 24-28, 2014.

2014. Invited Speaker, University of Arizona, Soil and Environmental Science Department.

2013. Invited Speaker, University of South Florida, Marine Science Program.

2013. Invited Speaker, University of Georgia, Marine Science Program.

2011. American Geophysical Union Annual Meeting, San Francisco. Permafrost

2011. American Geophysical Union Annual Meeting, San Francisco. Climate Change Education.

2011. Gas Hydrates. To the Florida Natural Gas Association. Naples, Fl June 24.

2010. International Goldschmidt Conference on Geochemistry. Knoxville, Tenn.. June 14-19

2010. American Water Resources Association, Wakulla Springs, May 21

2010. Solid Waste Association of North America Landfill Gas Conference, San Diego, CA. 3/8-11.

2010. University of Illinois, January 14.

2009. American Geophysical Union Meeting San Francisco, December.

2008. 38th Underwater Mining Institute Marine Minerals Meeting, Oxford, Mississippi, Nov.

2008. Florida Electric Cooperative Association, Annual conference, Clearwater, Florida, August,

2008. Florida Chapter of the American Planning Association.

2008. Florida State University College of Law.

2007. Florida Municipal Electric Association, Florida Municipal Power Association Annual conference, Palm Beach, FL, July 18.

2007. International Baccalaureate Program, Rickards High School, March.
2007. Waste Technology, Landfill Technologies Conference, March, 2007, Miami Beach.
2007. Ohio State University.
2006. American Geophysical Union Fall Meeting.
2006. FSU College of Law.
2006. FSU Department of Biology.
2006. American Geophysical Union, San Francisco.
2005. Rotary Club
2005. Civitan Club.
2004. Utah State University.
2004. University of Florida.
2004. UNOCAL conference on hydrocarbon migration and mitigation in soils.
2003. Keynote speaker and session leader. Finnish Environmental Conference, Joensuu, Finland, May, 2003.
2002. Soil Science Society of America, Annual Meeting. Indianapolis, November, 2002.
2000. Gas Hydrate International Research Workshop, Washington, DC, October 2002.
2002. 2nd Intercontinental Landfill Research Symposium, Ashville, NC. October, 2002.
2002. Solid Waste Association of North America, Monterey, California, March, 2002.
2002. Florida Fish and Wildlife Conservation Commission.
2002. Panel on non-point source pollution of the coastal zone to President Bush's Ocean Commission, St. Petersburg, FL, February, 2002.
2000. Florida A&M University, November.
1999. XVI International Botanical Congress, St. Louis, Missouri, August 1-7. .
1999. Tulane University, New Orleans, Louisiana
1999. University of Delaware.
1998. Cornell University, Ithaca, NY.
1997. Department of Geology, University of Missouri, Colombia.
1997. Estuarine Research Federation National Meeting, Providence, R.I., October.
1997. Chemical Oceanography Gordon Conference, Meriden NH, August.
1997. Swedish Agricultural University at Uppsala, and
1997. University of Linkoping, Sweden, August.
1997. Canadian National Centre of Excellence on Sustainable Forestry Management, Workshop on Carbon Cycling, University of Alberta, Edmonton, January 20.
1996. Invited participant, IGBP- Land-ocean interactions in the coastal zone. July 6-10, Moscow, Russia.
1996. Invited speaker, Conference on Sustainable Forestry, Edmonton, Alberta, Canada

G. Academic Service

- 2010-2016. Director FSU Environmental Science Undergraduate Program
- 2005-2016. Director FSU Aquatic Environmental Science MS Program and Professional MS Program
- 2010-2013 Florida Climate Institute Steering Committee.
- 2010 Faculty advisor, ACC Leadership Conference, Feb 19-21, Tallahassee.
- 2007-2015 Faculty advisor for the FSU Environmental Service Program.
- 2007 Faculty. Austral Summer Institute, University of Concepcion, Chile.
- 2005-2007 Director Aquatic Environmental Science Masters program, FSU.
- 2004-11 Associate editor, Journal of Geophysical Research, Biogeosciences.
- 2005-15 FSU Science Education Advisory Board.
2003. Faculty. Stable Isotopes in Biogeochemistry and Environmental Science. Mekrijarvi Research Station, Finland. Graduate students and faculty (25) attended from the Universities of Helsinki, Joensuu, Jyväskylä and Kuopio, the Finnish Forest Research Institute, the National Public Health Institute, the Agrifood Research Institute and the Finnish Institute of Marine Research. October 7-10, 2003.
- 2002 Invited Participant. NSF & American Society of Limnology and Oceanography workshop participant for Emerging Research Issues for the Study of Inland Waters. Boulder Colorado, December, 2002.
- 1999 Co-Chair, measurement task group, SCOR working group 112, meeting in Birmingham, UK joint with IUGG.
- 1999 Discussion leader, Marine Minerals Resources meeting on Gas Hydrates in the Gulf of Mexico, Biloxi, Mississippi.
- 1998 Associate member, SCOR Working Group on the Magnitude of Submarine G
- 1998 NOAA/Atlantic National Estuarine Reserve proposal review panel.
- 1998 Co-chaired session on Groundwater discharge to the Ocean at AGU Ocean Science meeting, San Diego, February, 1998.
- 1999 1995-1999, Advisory Board Member of Southeastern Regional Center of the National Institute for Global Environmental Change (NIGEC is a DOE division).
- 1996 Invited participant Joint NASA-EPA workshop on application of remote sensing. Washington, DC, December 12 & 13.
- 1996 Invited participant and reporter, Joint North American-European workshop on Measurement and Modeling of Methane Fluxes from Landfills (IGBP-Igac-Tragex). Oct. 21-24, Argonne National Labs, USA.
- 1996 Invited participant and panel member, IGBP/GAIM (International Geosphere Biosphere Programme/Global Analysis, Interpretation and Modeling) workshop. May 15-20, 1996, Santa Barbara, CA.

H. Public Service and Community Outreach

In 2005 I received an Aldo Leopold Fellowship Award. The Leopold Leadership Program advances environmental decision-making by providing academic scientists with the skills and connections needed to be effective leaders and communicators. I received intensive training to better communicate the science associated with complex environmental issues to the

media, policy makers, business leaders and non-scientists. My work listed above has taken been aided by this training, but I was pursuing this path prior to receiving the Leopold training. In 2005 I received an award as the Florida Wildlife Federation Conservation Communicator of the Year. I have given multiple presentations to elected officials, their delegates, and the public on the science of climate change, sea level change and the oil spill. I help organize a summit on Alternative Energy this fall at Eckerd College.

1. State and federal government. I was one of 10 scientists who responded to Governor Scott's statement that "he was not a scientist" and thus could not respond to questions about climate. We wrote a letter, got national publicity and were able to achieve a meeting with the governor as well as his democratic challenger, former governor Charlie Crist. I gave a number of interviews last summer including "Here and Now" on national public radio. I've also given presentations to the Secretaries of the Florida Department of Environmental Protection, Michael Sole and Colleen Castille. I've also given presentations to the former Ombudsman of DEP and to the Florida Fish and Wildlife Conservation Commission. I've given a brief presentation to and met twice with former Federal Congressman Allen Boyd and met with Gwen Graham and the staff of Senators Nelson and Martinez.

2. Public Utilities and Planners. In the last several years I've participated in debates concerning the interaction of human activity and the earth's climate and the effect on Sea Level for groups such as the Florida Electric Cooperative Association, the Florida Chapter of the American Planning Association, the Florida Municipal Electric Association & Florida Municipal Power Association, and the Florida Gas Utility.

3. The general public. I have given presentations at the Rotary Club, the Civitan Club, the Presbyterian Church, the local Synagogue, the Unitarian Church, the Universalist Church and in a variety of other venues aimed at the public at large including Ray's Steel City Saloon, Waterworks, and Cabo's Tacos. With my wife I formed a local non-profit corporation devoted to environmental education.

I. Peer Reviewed Journal Articles: *Student first authored papers, author in italics.*

In preparation.

Paeng J., Glaser, P. H., Chanton, J. P., Corbett, J. E., and Dittmar, T. Dissolved black carbon in peatlands of northern Minnesota, USA, in prep.

In Review. *Student first authored papers, author in italics.*

Deng, J., C.K. McCalley, S. Frolking, J. Chanton, P. Crill, R. Varnet, G. Tyson, V. Rich, M. Hines, S. R. Saleska, C. Li. Adding stable carbon isotopes improves model representation of the role of microbial communities in peatland methane cycling along a gradient of permafrost thaw. *Journal of Advances in Modeling Earth Systems*.

Wilson, R.M. and M.M. Tfaily, V.I. Rich, J.K. Keller, S.D. Bridgham, C. Medvedeff, L. Meredith, P.J. Hanson, M. Hines, L. Pfeifer-Meister, S.R. Saleska, P. Crill, W.T. Cooper, J.P. Chanton, and J.E. Kostka. Hydrogenation of Organic Matter as a Terminal Electron Sink Sustains High CO₂:CH₄ Production Ratios Regulating Climate Feedbacks in Boreal Peatlands and Thawing Permafrost. Submitted to **Organic Geochemistry**, September 1, 2016.

Burdige, D.J., T. Komada, C. Magen, and J. P. Chanton, Methane Dynamics in Santa Barbara Basin (USA) Sediments as Examined with a Reaction-Transport Model. To be submitted to **Journal of Marine Research**, June 16, 2016. .

Mondav, R., C. K McCalley, S. B Hodgkins, V. I. Rich, S. Saleska, S. Frolking, J. P Chanton, P. M. Crill. Contrasting microbial assemblies and processes across a permafrost thaw gradient. **Environmental Microbiology and Environmental Microbiology Reports**. Submitted November 13, 2015.

Schwing, P.; Chanton, J. Romero, I.; Hollander, D.; Goddard, E.; Glabach, M.; Reilly, L., Tracing the Incorporation of Petroleum Carbon into Benthic Foraminiferal Calcite Following the Deepwater Horizon Event. **J. Geophys Res. Oceans**, in review.

Babcock-Adams, L., J.P. Chanton, S.B. Joye, P.M. Medeiros. Hydrocarbon Composition and Levels in the Gulf Sediments within 3 Years following the Macondo Well Blowout. Submitted to **Environmental Pollution**, October 12, 2016.

Student first authored papers, author in italics. Reviewed articles.

In press, accepted for publication

260. *Bosman, S.H.*, Chanton, J.P., and Rogers, K.L. Using stable and radiocarbon analyses as a forensic tool to find evidence of oil in the particulates of the water column and on the seafloor following the 2010 Gulf of Mexico Oil Spill. In: Stout, S. and Wang, Z. (eds). *Case Studies in Oil Spill Environmental Forensics*. Academic Press. In Press.

259. Wilson, R.M., L. Fitzhugh, G. Whiting, S. Frolking, M.D. Harrison, N. Dimova, W.C. Burnett and J.P. Chanton. Greenhouse gas balance over thaw-freeze cycles in discontinuous zone permafrost. **Journal of Geophysical Research Biogeosciences**, in press.

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258. Wilson, R.M. and A.M. Hopple, M.M. Tfaily, S.D. Sebestyen, C.W. Schadt, L. Pfeifer-Meister, C. Medvedeff, K.J. McFarlane, J.E. Kostka, M. Kolton, R. Kolka, L.A. Kluber J.K. Keller, T.P. Guilderson, N.A. Griffiths, J.P. Chanton, S.D.

- Bridgham, and P.J. Hanson. 2016. Stability of peatland carbon to rising temperatures, **Nature Communications**, DOI: 10.1038/ncomms13723
257. Komada, T., D. J. Burdige; C. Magen, H.L. Li, J.P Chanton. 2016. Recycling of organic matter in the sediments of Santa Monica Basin, California Borderland, **Aquatic Geochemistry**, 22, 592-618. doi:10.1007/s10498-016-9308-0
256. Glaser, P.H., D.I. Siegel, J.P. Chanton, A.S. Reeve, D.O. Rosenberry, J.E. Corbett. S. Dasgupta. 2016. Climate-Driven Shifts in Solute Transport and Methane Production Zones Within the Glacial Lake Agassiz Peatlands, Northern Minnesota. **Global Geochemical Cycles**, 10.1002/2016GB005397.
255. Fernández, A., K. R. Rogers, S. C. Weber, J.P. Chanton and J. P. Montoya. 2016. Deep Water Horizon oil and methane carbon entered the food web in the Gulf. **Limnology and Oceanography**, doi: 10.1002/lno.10440
254. Joye, S.B., A. Bracco, T. Özgökmen, J. P. Chanton, M. Grosell, I. MacDonald, E. E. Cordes, J. P. Montoya, and U. Passow, 2016. The Gulf of Mexico Ecosystem, six years after the Macondo Oil Well Blowout. **Deep Sea Research II**, 129, 4-19.
253. Burdige D.J., T. Komada, C. Magen, J.P. Chanton, H-L Li. 2016. Modeling studies of dissolved organic matter cycling in Santa Barbara Basin (CA, USA) sediments. **Geochem. Cosmochem, Acta**, 195, 100-119, <http://dx.doi.org/10.1016/j.gca.2016.09.007>
252. Walter- Anthony, K.W., R. Daanen, P. Anthony, T. Schneider von Deimling, C.-L. Ping, J. Chanton, G. Grosse. 2016. Ancient methane emissions from ~60 years of permafrost thaw in arctic, **Nature Geoscience**, 9, 679-682. doi:10.1038/ngeo2795.
251. Abichou, T., H. Melaouhia, B. Higgs, J. Chanton, R. Green. Innovations in Measuring Field Scale Biological Methane Oxidation at Two Soil-Covered Closed Landfills. 2016. **Current Environmental Engineering**, v.3, DOI: [10.2174/2212717803666160530143550](https://doi.org/10.2174/2212717803666160530143550)
250. Atwater, J.W., A.R. Abedini, and J. Chanton. Quantifying Methane Oxidation in Cover Soils of the Vancouver Landfill Using the Stable Isotope Technique. 2016. **Current Environmental Engineering**, v.3, DOI: [10.2174/2212717803666160905114423](https://doi.org/10.2174/2212717803666160905114423)
249. Burdige D.J., T. Komada, C. Magen, J.P. Chanton, 2016. Carbon cycling in Santa Barbara Basin sediments: A modeling study, **Journal of Marine Research**, 74, 133-159, 2016.
248. De la Cruz, F. Green, R. Hater, G. ; Chanton, Jeffrey; Thoma, Eben; Harvey, Tierney; Barlaz, Morton. 2016. "Comparison of Field Measurements to Methane Emissions Models at a New Landfill" **Environmental Science and Technology** 50, 9432-9441. DOI 10.1021/acs.est.6b00415. .
- 247 Yan, B., U. Passow, J. Chanton, E. Nöthig, V. Asper, J. Sweet, M. Pitiranggon, A. Diercks, D. Pak. 2016. Natural Marine Particles Mediated Sedimentation of Oil and Drilling Mud Components from the DWH spill, **Proceedings of the National Academy of Science** 113 (24) E3332-E3340; doi:10.1073/pnas.1513156113
246. Hodgkins, S. B., M. M. Tfaily, D.C. Podgorski, C. K. McCalley, S.R. Saleskae, P. M. Crill, V. I. Rich, J. P. Chanton, W. T. Cooper. 2016. Elemental composition and optical properties reveal changes in dissolved organic matter along a permafrost thaw chronosequence in a subarctic peatland, **Geochim, Cosmochim, Acta**, 187, 123-140.
245. Blanc-Betes, E., J. M. Welker, N. C. Sturchio, J. P. Chanton, M. A. Gonzalez-Meler. 2016. Increases in winter precipitation and snow accumulation transform Arctic tundra from a sink to a source of methane. **Global Change Biology**, doi 10.1111/gcb.13242
244. Esson, K.C. X. Lin, D. Kumaresan, J. P. Chanton, J. C. Murrell, and J. Kostka. 2016. Alpha and Gammaproteobacterial Methanotrophs Co-Dominate the Active Methane

Oxidizing Communities in an Acidic Boreal Peat Bog. **Applied Environmental Microbiology**, doi:10.1128/aem.03640-15.

243. McKay, C., J. C Rask, A. M Detweiler, B. M Bebout, R. C. Everroad, J. Z Lee, J. P. Chanton, M. H Mayer, A.L. Caraballo; B. Kapili, M. Al-Awar; A. Al-Farraj. 2016. An unusual inverted saline microbial mat community in an interdune sabkha in the Rub' al Khali (the Empty Quarter), UAE: An analog for habitats on present Mars, **PLOSI**, 2016, <http://dx.doi.org/10.1371/journal.pone.0150342>
242. Daly, K.L., U. Passow, J. Chanton, and D. Hollander. 2016 Assessing the Impacts of Oil-Associated Marine Snow Formation and Sedimentation during and after the Deepwater Horizon Oil Spill. **Anthropocene**, 13 18-33, <http://dx.doi.org/10.1016/j.ancene.2016.01.006>
241. Komada, T. D. J Burdige; H.L. Li; C. Magen; J.P Chanton. 2016. Organic matter cycling across the sulfate-methane transition zone of the Santa Barbara Basin, California Borderland, **Geochimica et Cosmochimica Acta**, 176, 259-278.
- 240 Wilson, R. M., J. Cherrier, J. Sarkodee-Adoo, S. Bosman, A. Mickle, J. P. Chanton. 2016. Tracing the intrusion of fossil carbon into coastal Louisiana macrofauna using natural ¹⁴C and ¹³C abundances. 2016. **Deep Sea Research, II** 89-95. [doi:10.1016/j.dsr2.2015.05.014](http://dx.doi.org/10.1016/j.dsr2.2015.05.014)
239. Weber, S., Battles, J. J., Peterson, L., Roberts, B. J., Peterson, R. N., Hollander, D. J., Chanton, J. P., Joye, S. B. 2016. Hercules 265 Rapid Response: Immediate ecosystem impacts of a natural gas blowout incident. **Deep Sea Research Part II: Topical studies in oceanography**, 129, 66-76. [doi:10.1016/j.dsr2.2015.11.010](http://dx.doi.org/10.1016/j.dsr2.2015.11.010)

2015

239. Kelley, C.A., J. P. Chanton, and B. M. Bebout. 2015. Rates and pathways of methanogenesis in hypersaline environments as determined by ¹³C-labeling, **Biogeochemistry**, 126(3), 329-341, DOI 10.1007/s10533-015-0161-9.
237. Bae, H.S., M. E. Holmes, J. Chanton, K. Reddy, and A. Ogram. 2015. Distribution, Activities, and Interactions of Methanogens and Sulfate Reducing Prokaryotes in the Florida Everglades. (Paper #AEM01583-15R1). **Appl Environ Microbiol** 81:7431–7442. [doi:10.1128/AEM.01583-15](http://dx.doi.org/10.1128/AEM.01583-15).
236. Hodgkins, S. B., J. P. Chanton, L. C. Langford, C. K. McCalley, S. R. Saleska, V. I. Rich, P. M. Crill, W. T. Cooper. 2015. Laboratory incubations reproduce field methane dynamics in a subarctic wetland, **Biogeochemistry**, DOI 10.1007/s10533-015-0142-z.
235. Rakowski, C., C. Magen, S. Bosman, L. Gillies, K. Rogers, J. Chanton and O. U Mason, 2015. Methane and microbial dynamics in the Gulf of Mexico water column. *Frontiers in Marine Science*, **Aquatic Microbiology**. V2 article 69, [doi: 10.3389/fmars.2015.00069](http://dx.doi.org/10.3389/fmars.2015.00069)
234. Brooks, G.R., Larson, R.A., Flower, b., Hollander, D., Schwing, P.t., Robero I., Moore, C., Reichart, GJ, Jilbert, T., Chanton, J., Hasing D. 2015. Sedimentation Pulse in the NE Gulf of Mexico Following the 2010 DWH Blowout. **PLOSI**, 10(7): e0132341. [doi:10.1371/journal.pone.0132341](http://dx.doi.org/10.1371/journal.pone.0132341)
233. Mei, C. R. Yazdani, B. Han, E. Mostafid, J. Chanton, J. Vander Gheynst, P. Imhoff. 2015. Performance of Green Waste Biocovers for Enhancing Methane Oxidation. **Waste Management**, 39, 205-215.
232. Abicho, T., T. Kormi C. Wang J. P. Chanton R. Green, F. Escobar. 2015. A Novel Approach to Estimate Methane Oxidation in Interim Landfill Covers across the United States. **International Journal of Environment and Waste Management** 15, 309-326.
231. Tffaily, M. M., J. E. Corbett, R. Wilson, J. P. Chanton, P. H. Glaser, K. M. Cawley, R. Jaffé, and W. T. Cooper 2015. Utilization of PARAFAC-Modeled Excitation-Emission Matrix

- 2 (EEM) Fluorescence Spectroscopy to Identify Biogeochemical Processing of Dissolved Organic Matter in a Northern Peatland. **Photochemistry & Photobiology**, 91, 684-695. Doi 10.1111/php.12448
230. Dasgupta, S., D.I. Siegel, C. Zhu, J.P. Chanton and P.H. Glaser. 2015. Geochemical Mixing in peatland porewaters: the role of organic acids. **Wetlands**, 1-9 10.1007/s13157-015-0646-2
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J. Refereed Special Publications and Refereed Book Chapters

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K. Other Publications, Popular Articles

11. Chanton, J. 2014. How Academics got traction with Florida Politicians on Climate Change. Millennium Alliance for humanity and the biosphere. <http://mahb.stanford.edu/blog/how-to-get-traction-with-politicians/>
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L. Major Reports to Local Government

6. Wakulla County Septic Tank Study Phase II: Report on Performance Based Treatment Systems. **Florida Department of Environmental Protection**, 12/7/2010.
5. Wakulla County Septic Tank Study Phase I: Woodville Karst SF₆ Tracer Study. **Florida Department of Environmental Protection**, 10/29/2008.
4. Manatee Springs Onsite Sewage Treatment and Disposal System Study Phase II. **Florida Department of Health**, 9/7/2009.
3. Study on Nutrient Removal in Onsite Sewage Treatment and Disposal Systems in Karst Areas. **Florida Department of Health**, 9/7/2008.
2. Manatee Springs Onsite Sewage Treatment and Disposal System Study: Phase I, **Florida Department of Health**, 11/24/04.
1. Determination of an Appropriate Onsite Sewage System Setback Distance to Seasonally Inundated Areas. **Florida Department of Health**, 8/20/2001.

RESEARCH FUNDING

Currently Active Projects. 4 DOE, 1 NSF, 2 GOMI, Seagrant, EREF \$2,784,214

Gulf Research Institute. Ecogig II Ecological Aspects of Oil and Gas, PI. J. Chanton and Ian MacDonald PI's, subcontract to University of Georgia, \$501,240 over three years, from Jan 1, 2015 to December 31, 2017

Gulf Research Institute. C IMAGE 2 FSU subcontract Chasing Ixtoc with Radiocarbon. PI: Chanton, subcontract to University of South Florida, \$319,000 over three years, from Jan 1, 2015 to December 31, 2017

US Department of Energy (DOE) Illuminating the pathways to carbon liberation: a systems approach to characterizing the 'consequential unknowns' of carbon transformation and loss from thawing permafrost peatlands. September 1, 2016 to August 31, 2019. FSU share \$407,598 with Bill Cooper.

US Department of Energy. Pathways to carbon liberation: a systems approach to understanding carbon transformations and losses from permafrost soils. Program: US DOE, Biological and Environmental Research, Budget: Sept. 1 2013 to Aug 31, 2016. FSU share, \$524,724, with William Cooper.

US Department of Energy. Toward A Predictive Understanding Of The Response Of Belowground Microbially-Mediated Carbon Turnover To Climate Change Drivers In A Boreal Peatland. Biological and Environmental Research, \$459,146, 10/1/14 to 9/30/17, with William Cooper.

US Department of Energy. Phenolic Compounds and Black Carbon Feedback Controls on Peat Decomposition and Carbon Accumulation in Southern Peatlands \$271,663.00, 10/1/14 to 9/30/17, with William Cooper.

National Science Foundation. Acquisition of a Gas Source Stable Isotope Ratio Mass Spectrometer (IRMS) for Earth and Ocean Sciences research at Florida State University, Seth Young, Jeremy Owens, Jeff Chanton, Vincent Salters Program: NSF, EAR I/F \$174,343 one year, from Apr 15, 2016 to Apr 14, 2017

Environmental Research and Education Foundation. \$70,000. *Methane Oxidation: Field-Scale Test Sections Experiment.* Abichou, Tarek (PI), & Chanton, Jeffrey P (Co-PI). (Aug 2015–Feb 2017).

Seagrant, Knauss Fellowship for Alexandra Harper. \$56,500 from January 2016 to February 2017.

Completed Projects. Total since arriving at FSU \$13,390,696

National Science Foundation. Collaborative Research: Dissolved organic carbon (DOC) transformations in deep sub-surface sediments and its role as a source of “old” DOC to the water column. \$169,111, From Jan 1, 2012, to Feb 28, 2016

US Department of Energy. Soil carbon storage and turnover in a northern peatland forest. With Bill Cooper. \$371,013 from October 2011 to September 2015.

Gulf Research Institute. Deep-C: Deep Sea to Coast Connectivity in the Eastern Gulf of Mexico Gulf Research Institute. \$440,121 from October 1, 2011, to September 30, 2015. 0.75 month summer salary, Location northern Gulf Region and FSU.

Gulf Research Institute. Ecosystem Impacts of Oil and Gas Inputs to the Gulf (ECOGIG) \$453,000 (Chanton share) from October 1, 2011, to September 30, 2015. 0.5 month summer salary, Location northern Gulf Region and FSU.

NASA. Redefining the boundaries of biogenic methane: Methane from endoevaporites. From February 2012 to Jan 2015. \$155,385.

NRC Postdoctoral Sponsor for Dr. Rachel Wilson, National Energy Technology Laboratory Methane Hydrate Research Fellowship. \$200,000k. Jan 1, 2012 to Jan 1, 2014.

US DOE. Genes, isotopes, and ecosystem biogeochemistry: dissecting methane flux at the leading edge of global change. , \$292,000, From October 2010 to September 2013 Location, Sweden and FSU.

Waste Management INC. Microbial studies at thiobacillus bioreactors. With Olivia Mason, from Jan 15, 2013 to December 31, 2013. \$37,747.00

Environmental Research & Education Foundation (EREF). Methane oxidation constrained with Air Plume studies.. \$35,000 from February 1, 2012 to March 31st, 2014.

Florida Institute of Oceanography. Radiocarbon tracing of oil intrusion from the Deepwater Horizon Oil Spill.. Florida Institute of Oceanography \$262,000 from September 2011 to August, 2012. with Jennifer Cherrier, Florida A&M University. Location, northern Gulf Region and FSU.

National Science Foundation. Collaborative Research: Shifting pathways toward methane in nutrient impacted tropical and sub-tropical wetlands. \$321,586. from 8/1/09 to 7/31/14.

National Science Foundation. With W.T. Cooper at FSU, other collaborators, Paul Glaser and Don Siegel. Collaborative Research: An interdisciplinary investigation of groundwater-carbon flux coupling FSU portion, \$493,448, \$3,000,000 overall. Feb 1, 2008 for 5 years.

Environmental Research & Education Foundation (EREF). Constraining the effects of secondary porosity on CH₄ Oxidation. With Tarek Abichou. \$134,000 from February 1, 2010 to March 31st, 2012.

Florida Institute of Oceanography. Radiocarbon tracing of oil intrusion from the Deepwater Horizon Oil Spill.. Florida Institute of Oceanography \$262,000 from September 2011 to August, 2012. with Jennifer Cherrier, Florida A&M University. Location, northern Gulf Region and FSU.

NOAA Seagrant. .with Kevin Craig @FSU Marine Lab. Environmental Controls On The Dynamics Of Nursery Habitat Quality For Estuarine-Dependent Species. \$172,863. Feb 1, 2010 to Jan. 31, 2013.

NASA Methanogenesis in hypersaline environments With Brad Bebout, NASA Ames Research Center. From Feb. 1, 2009 to Feb 14, 2012. \$183,099.

US Department of Energy via University of Mississippi. Coupling of continuous geochemical and sea floor acoustic measurements. Gulf of Mexico Gas Hydrate Research Consortium. 10/1/04 to 6/30/12. Total, \$524,495.

Gulf Research Institute. Northern Gulf Institute. With Kevin Craig. Radiocarbon tracing of Oil Intrusion in the coastal zone. 2010-2012. \$170,305.

Florida DEP. Wakulla County Septic Tank Study, \$230,132, from August, 2008 to December, 2011.

NOAA, Northern Gulf Institute. With Chris Koenig and Felicia Coleman. Stable Isotope Studies. From 2007 to 2011. \$196,433

NRC Postdoctoral Sponsor for Dr. Laura Lapham, National Energy Technology Laboratory Methane Hydrate Research Fellowship. Total package > 200k. Feb 1, 2008 to Feb 28, 2010.

Waste Management Inc. with Tarek Abichou. Isotopic and modeling studies of landfill gas emission. \$310,000 Jan 07 to Feb. 10

National Science Foundation with Y. Wang. Technician Support for the Stable Isotope Laboratory at Florida State University. Total amount: \$89,545 (4/01/09-3/31/11).

National Science Foundation with Y. Wang. Technician Support for the Stable Isotope Laboratory at Florida State University – Phase I, 1/1/06 to 12/31/09. Total, \$228,526.

National Science Foundation. with Bill Burnett and Bill Hu. Assessing the Driving Forces of Submarine Groundwater Discharge. 09/01/2005 to 8/31/09, Total, \$450,408

Florida Department of Environmental Protection with W. Burnett. Tracing groundwater discharge to Central Florida Lakes. \$130,000. January 07 to December 09.

Florida (Hinkley) Center for Solid and Hazardous Waste Management, Developing a Best Management Practices (BMP) Manual for Reducing Greenhouse Gas Emission, Odors, and non-Methane Hydrocarbons from Landfills September 1, 2007 to August 31, 2009. Total, \$30,000

National Science Foundation with Behzad Mortazavi. Ecosystem-Respired CO₂ in Southeastern Pine Forests. 03/01/04 – 02/28/07 Total, \$395,736.

National Science Foundation with Tarek Abichou. Inexpensive Biocover and Biofilter Approaches for Effective Reduction of Methane Emissions from Landfills 10/1/03 to 09/30/07. Total. \$389,454

US EPA, Gulf of Mexico Program with W. Burnett. Assessment of Groundwater Discharge and Sewage Impacts into Sarasota Bay and Suwannee River Estuary via Rapid Marine Reconnaissance, Remote Sensing, and Tracer Methods. From March, 2002 to March, 2007. Total, \$175,243.

US Department of Energy via National Institute for Global Environmental Change. Carbon isotopic studies of assimilated and ecosystem respired CO₂ in a SE pine forest. 10/1/04 to 9/30/07. Total, \$161,000.

Florida Department of Health. Study of Onsite sewage treatment and disposal in karst areas, phase II. \$41,569 from 9/1/05 to 8/31/07.

Waste Management Inc. Modeling of Methane Emissions November 1, 2006 to Jan 31, 2007, 28,900

Waste Management Inc. Chamber Flux vs. Laser Determined Emission Rate Comparison. May 1, 2006 to Sept 30, 2006. \$87,000.

Florida Dept. of Environmental Protection with Tarek Abichou. Use of recycled materials to reduce odors from landfills. 10/1/05 to 9/30/06. Total, \$165,000.

Florida Dept. of Environmental Protection with Tarek Abichou, via Florida Center for Solid and Hazardous Waste Management. Bio-reactive cover systems: inexpensive approaches for mitigating methane emission from landfills. 09/01/03 - 08/31/06. Total, \$150,000.

National Science Foundation with Yang Wang, Acquisition of a stable isotope mass spectrometer, equipment grant, \$315,000 04/01/03 - 03/31/04 FSU

US Department of Energy Monitoring biogeochemical processes controlling hydrate formation, decomposition and composition in the Gulf of Mexico. From Feb 2002 to Sept. 2003. \$71,000.

NOAA Seagrant With W. Burnett. Assessment of sewage impacts via groundwater discharge into two coastal bays. From Feb, 2002 to Dec 2004. \$119,873.

National Science Foundation with Gary Whiting, Methane cycling in permafrost regions. \$600,000. from March 2001 to February 2004.

National Science Foundation. Acetate biogeochemistry in northern wetlands: Implications for methane formation during climate change. FSU share, \$115,000, from 3/01 to 2/04.

Florida DEP with W. Burnett, PI. Assessment of groundwater discharge into Lake Barco via Radon Tracing. Florida DEP. \$40,797 from November 1, 2001 to October 30, 2002.

Florida Department of Health. Study of Onsite sewage treatment and disposal in karst areas. \$70,569. 3/1/02 to 8/31/04.

US Department of Energy Controls of net ecosystem exchange at an old field, a pine plantation and a hardwood forest under identical climatic and edaphic conditions. \$74,928/year for three years, 9/00-8/03.

NOAA/National Marine Fisheries with C. Koenig, F. Coleman. Past and Present Trophic Structure of Florida Bay. \$94,000/year for two years, 9/00 to 8/02.

Florida Department of Health. Determination of an Onsite Sewage System Setback Distance for Seasonally Inundated Areas. \$86,059, from August 99 to December 2000.

NOAA Seagrant. With W. Burnett. Tracer techniques to evaluate rates of non-point source pollution from Barrier Islands to surface water. from Feb 1, 2000 for 2 years \$114,833.

US-EPA. Great Waters EPA program Nitrogen Isotopic studies on Sarasota Bay, watershed and airshed. \$60,000 for March, 1999 to July, 2001.

US Department of Energy. Isotopic studies at Ameriflux tower sites: Estimating CO₂ exchange and Anthropogenic CH₄ total, \$247,000. July 1, 1998 to June 30, 2001.

Florida DEP. Nitrogen Stable Isotopes for Tampa Bay Atmospheric Deposition Study. Total, \$90,000. from July, 1998 to November 30, 1999.

US-EPA. Use of Natural and Artificial tracers to detect the subsurface flow of contaminated groundwater in the Florida Keys, \$74,949/year. from October 1, 1997 for two years.

US Department of Energy. with L. Proctor, A molecular study of denitrification and nitrogen fixation in relation to nutrient loading in the Coastal zone. from 8/97 to 8/00, Total, \$353,833

Florida Power and Light Corporation. with L. Proctor Biodegradation and Environmental Impacts of Orimulsion. \$225,000, January, 1997 to August, 1998.

NOAA, with W. Burnett. Role of Groundwater in the Nutrient Budget of Florida Bay. from June 1, 1997 to June 30, 2000. Total, \$118,221.

US Department of Energy. With L. Robinson (et. al) and Florida A&M University. Marine Biotechnology and Marine Estuarine Environmental Science Research Program at Florida A&M University. DOE. Total grant 5.4 million dollars over 5 years, starting fall, 1997.

NOAA. with F. Coleman and Chris Koenig. Past and present trophic structure of Fla. Bay seagrass communities. NOAA, June 1, 1997 to June, 2000. \$193,000.

National Science Foundation. Hydrogeologic Drivers for the Carbon dynamics in Large Peatlands. With P. Glaser and D. Seigel. Chanton share, total, \$185,000. from April, 1997 to March, 00.

NOAA-NURC. (National Undersea Research Center). With W. Burnett In situ observations and sampling of contaminated groundwater in the Florida Keys \$23,000 over 2 years + 3 weeks boat time and 3 weeks condo time in the keys/year.

US-EPA. Tracing submarine groundwater discharge. with W. Burnett and R. Iverson. Total, \$99,000 from October 1, 1995 to September 29, 1997.

US-DOE-NIGEC. Isotopic Signature of atmospheric methane at NIGEC tower sites. Total, \$208,000. From October, 1995 to June 31, 1998.

US-EPA. Isotopic signatures of Anthropogenic Methane: Landfills and Coal mines. Total, \$106,000, from October, 1995 to September, 1998.

Florida Department of Environmental Protection (WR052), "Preliminary Estimates of Groundwater Inputs to Florida Bay", with W. Burnett, 2/28/95-11/1/95, \$25,000.

NOAA Sea Grant - "Significance of Submarine Groundwater Discharge on Seagrass Distribution, Biomass, and productivity", (with W. Burnett and R. Iverson), 3/1/95-2/28/98, Total, \$152,362.

USAir Force via Battell. Stable Isotopic Analysis of Carbon Compounds, Soil Organic Carbon, Methane and Carbon dioxide in the Columbus AFB Aquifer as Part of the natural attenuation experiment, \$172,000 Sept. 94 to Sept. 98.

NASA. Control on methane emissions from vegetated wetlands: substrate, oxidation and transport. Oct 1, 1993 to Sept. 30, 1997. \$150,000. (50k/year).

NASA. with J.E. Edwards. Resolving a major discrepancy regarding rhizospheric methane oxidation. Total, \$66,000, September, 1993 to August, 1997.

Virginia Institute of Marine Science. Support for Jennifer Cherrier, VIMS, Total, \$58,000. December, 1994 to 96.

N.W. Florida Water Management District. Stable isotope tracing of food chains in Apalachicola Bay. Total, \$158,507 1992-1996.

- US Department of Energy**, via National Institute of Global Environmental Change. The role of plants in regulating CH₄ emission, Total, \$194,000, 1992-1994.
- National Science Foundation**. An Isotope ratio mass spectrometer for Florida State University--NSF equipment grant, with J. Bauer, W. Burnett, W. Cooper, J. Cowart, A. Arnold, S. Wise and others. NSF equipment grant, \$125,000. 1992-1993
- National Science Foundation**. Tracing submarine groundwater discharge. With W. Burnett and G. Weatherly, Total, \$364,000. 1991-1994.
- National Science Foundation**. Resting eggs of marine copepods: How long do they survive and what is the effect of anoxia and hydrogen sulfide on their viability. With Nancy Marcus, \$300,000. 1992-1996.
- Earthwatch**, Groundwater seepage in the Gulf of Mexico. With W. Burnett, \$30,000. 1992-94.
- NASA**. Stable Isotope tracing of methane emission and oxidation in a Louisiana wetland. Total, \$51,000. 1991-1992.
- NOAA**. The role of vegetation-biomass, leaf surface area and carbon fixation rate in controlling methane flux for terrestrial wetlands –total, \$108,000, 1991-1992.
- NASA**. Carbon and hydrogen isotopic composition of methane emitted from subtropical to Arctic wetlands: modifications by dominate macrophytes and anthropogenic disturbance. Total. \$196,000, 1989-1992
- Petroleum Research Fund**. Investigations of isotope fractionation in the diffusion of methane across the water-air interface and through aqueous solution. Total, \$18,000, 1989-1991.
- FSU Foundation**. Sulfur isotopic study of Scan Bay sediments, \$1,440, 1989.
- FSU Foundation**. Methane emission from northern wetlands, \$2,500, 1990.
- Florida Institute of Oceanography**. Geological Oceanography Training Cruise. \$.5,190 each year, 1990, 1991, 1992
- AT UNC Chapel Hill: UNC University Research Council**. Isotopic Studies of the West Florida Escarpment Sulfur Cycle. \$1,500, 1987.
- National Science Foundation**. With C. Paull, C. Martens. Geological/geochemical studies at the sulfide seep sites at the base of the West Florida Escarpment, Gulf of Mexico. \$60,000, 1988.
- National Science Foundation**. Florida escarpment: Genesis, Geomorphology, and Seepage Processes. Total. \$60,000, 1985-1987.
- NASA**. Seasonal variations in isotopic signatures of methane produced in organic rich environments. From Total. \$210,000, 1985-1988.
- NASA**. Radon tracing of biogenic gas fluxes from coastal wetlands and tidal freshwater estuaries. Total. \$200,000, 1988-1990.

N. Teaching: Courses taught last 15 years

Spring 2016	IFS 2088, Sustainable Food and Water. 55 students.
Fall 2015	OCE 4017, 5018 Current Issues in Environmental Sciences 125/2 students
Spring 2015	OCE 1001 176 and 67 students (2 sections)
Fall 2014	OCE 4017, 5018, Current Issues in Environmental Science 125/1 students
Spring 2014	OCC5415 Marine Geochemistry, 15 graduate students.
Fall 2013	OCE 4017, 5018, Current Issues in Environmental Science 119/3 students
Spring 2013	OCE 4008, Principles of Oceanography, 128 students.
Fall 2012	OCE 4017, 5018, Current Issues in Environmental Science 120/5 students
Spring 2012	OCE 4008, Principles of Oceanography, 131 students.
Fall 2011	OCE 4017, 5018, Current Issues in Environmental Science 110/6 students
Spring 2011	OCC5415 Marine Geochemistry, 12 students.
Fall 2010	OCE 4017, 5018, Current Issues in Environmental Science 90/3 students
Spring 2010	Sabbatical.
Fall 09	OCE 4017, 5018, Current Issues in Environmental Science 90/3 students.
Spring 09	OCC5415 Marine Geochemistry, 11 students.
Fall 08	OCE 4017, 5018. Current Issues in Environmental Science, 71/5 students.
Spring 08	OCE 1001. Elementary Oceanography. 250 students
Fall 07	OCE 4017, 5018. Current Issues in Environmental Science, 74/9 students.
Spring 07	OCE 4017, 5018. Current Issues in Environmental Science, 33/2 students.
Fall 06	OCC5415 Marine Geochemistry, 12 students.
Spring 06	OCE 4930, 5930 Current topics in Environmental Science, Stable Isotope Geochemistry, 33/5 students.
Fall 05	OCE 1001. Elementary Oceanography, 250 students
Spring 05	Stable Isotope Geochemistry. 12 students
Fall 04	OCC5415 Marine Geochemistry 100%, 8 students.
Spring 04	OCE 4930, 5930 Current topics in Environmental Science, 100%, 30 students OCG 5050 Geological Ocean 25% 8 students
Fall 03	1001 ½ of 2 sections, 500 students
Spring 03	OCE 4930, 5930 Current topics in Environmental Science, 100%, 44 students
Fall 02	OCC 5415 Marine Geochemistry, 100%, 11 students
Spring 02	OCG 5050 Geological Ocean 25% 10 students OCE 4930. 5930 Current topics in Environmental Science, 100%, 42 students
Fall 01	OCE 1001 ½ of 2 sections, 500 students

Spring 01	OCE 4930, 5930 Current topics in Environmental Science, 100%, 44 students
Fall 00	on sabbatical
Spring 00	OCG 5050 Geological Ocean 25% 8 students
	OCE 4930, 5930 Current topics in Environmental Science, 100% 40 students
Fall 99	OCE 1001 ½ of 2 sections, 500 students
Spring 99	OCG 5050 Geological Ocean 50%
	OCG 4050 Geo Ocean 50%
Fall 98	OCE 1001 ½ of 2 sections, 500 students
Spring 98	OCC 5415 Marine Geochemistry 50%, 12 students
	OCE 1001H 50%, 8 students
Fall 97	OCE 1001 ½ of 2 sections, 500 students
Spring 97	OCC 5415 Marine Geochemistry 12 students
	OCE 1001H 50%, 8 students